

David Wright, *Translating Science: The Transmission of Western Chemistry into Late Imperial China, 1840-1900*. Sinica Leidensia, 48. Leiden: Brill, 2000. xxvi, 558 pp., 33 illus.

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David Wright has produced a one-volume encyclopedia on the introduction and development of western science in China during the second half of the nineteenth century. The book is composed of twelve chapters covering translation, publication, education, manufacturing, institutions, biographies and other topics related to the subject in question. It also includes a comprehensive bibliography (66 pages) of primary sources and published works in Chinese and English, plus a few in Japanese and French, and appendices (38 pages) listing the Chinese and western names of important persons, schools, textbooks, chemical elements, and the like. The book is handsomely published, with a large number of illustrations that help bring the subject to life.

This book will be of interest to novices who seek an introduction to an important topic in the history of science and of China and to specialists who want to quick and readable reference to the literature and subject matter. It is a summary and compendium of scholarship that has been produced in Chinese and English during the past quarter century on the history of science in late-Qing China. It is a good reference work.

Before rushing out to buy this book, which comes from a respected publisher of scholarly works and carries an appropriately hefty price tag, the reader should be aware of what it does not contain. First, the book does not contain previously unpublished material. Rather, it summarizes or discusses topics and sources that have been covered in English-language publications, and if not in English, then in Chinese-language books and articles which have appeared in the past ten to twenty years. There are no revelations based on new primary sources and nothing that will surprise the reader already familiar with the history of science in modern China. Second, the book does not put forward any thesis or proposition. Each chapter ends with a "conclusion," and the final chapter revisits several of the main points, but these appear as disjointed comments on various topics or aspects more or less related to the principal subject. There is no organizing idea.

In the absence of either new research or original theory, the reader is left with a series of mini-essays or sketches that cut back and forth across the playing field, without identifiable purpose or connection to the main subject. For example, the chapter on John Fryer (pp. 100-127) deals almost exclusively with

Fryer's personal history and his relationship to Europe and Europeans, makes one assertion about his impact on the reformer Tan Sitong, but otherwise says nothing about how Fryer did or did not affect the development of science in China. Readers unfamiliar with the extensive literature on Fryer might not understand why so much was being made of him. Similarly, the lengthy discussion of the nature of translation (pp. 186-201) fails to show how this esoteric branch of European scholarship might be applied to explain the translation of western scientific writing into Chinese. The reader is presented with separate treatments of translation theory and scientific translations in China and left to figure out whether and how these two topics might be connected. As a final example, the descriptions of "traditional Chinese conceptions of nature" (pp. 2-23 and 66-71) are ripe with possibilities for showing how traditional categories and theories of nature were or were not linked to the introduction and development of modern science in China. Were yinyang, wuxing, and gezhi precursors, sources, or obstacles to western science? Some, all, or none of the above? And how? It is difficult to know what the author thinks, or the reader should think, about these interesting questions.

*Translating Science* is a useful look back at scholarship on the history of science in late-Qing China, but does little to carry the investigation forward.